

# Singapore's fight against infectious diseases

## 1918 SPANISH FLU

**Type of virus:** H1N1

**First wave:** June 18 to July 27

- "Mysterious epidemic" appears in Singapore on June 18. Reported to be relatively mild, with a high illness rate but a low mortality rate. Peaks during the week ending July 6.

**Second wave:** Oct 3 to Nov 8

- A second intense wave occurs in October and November. Peaks during the week ending Oct 26.
- By Oct 28, the Singapore General Hospital is handicapped, with 12 out of 19 nurses ill with influenza.
- Epidemic abates by Nov 2. After Nov 8, no more cases reported.

**Deaths:**  
Singapore  
**2,870-6,660\*\*\***  
Worldwide  
**40-50 million**

## 1957 ASIAN FLU

**Type of virus:** H2N2

**Period:** April to May

- First recognised in Singapore in end-April among 30 infected inhabitants on Pulau Brani.
- By May 5, the outbreak has become an epidemic. Schools are closed for almost two weeks.
- Outbreak reaches its peak in mid-May and tapers off by the end of the month.

**Deaths:**  
Singapore  
**680\*\***  
Worldwide  
**1.1-2 million\***

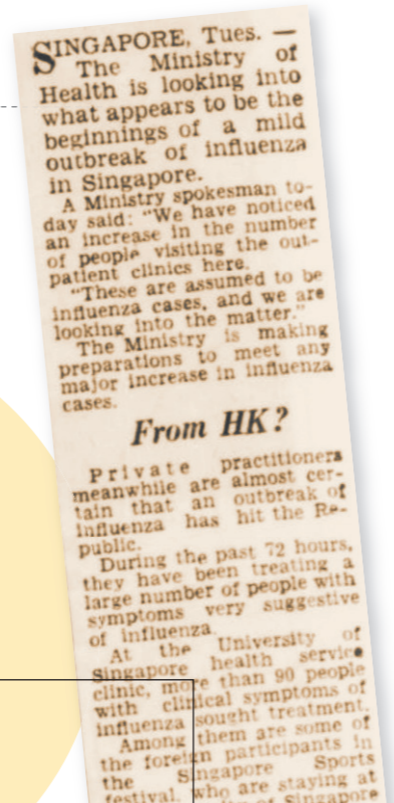
## 1968 HONG KONG FLU

**Type of virus:** H3N2

**Period:** August to September

- First detected in Hong Kong on July 13.
- On Aug 14, The Straits Times describes it as "a mild outbreak of influenza".
- The outbreak peaks between Aug 16 and 25. As it is relatively mild, no substantial public health measures are adopted.
- Virtually disappears by early September.

**Deaths:**  
Singapore  
**540\*\***  
Worldwide  
**1 million**



## 2002-2003 Severe acute respiratory syndrome (Sars)

**Type of virus:** Coronavirus

**Period:** March to July

- First case confirmed in Guangdong, China, in November 2002.
- On March 1, 2003, Singapore's first Sars patient, who had visited Hong Kong, is admitted to Tan Tock Seng Hospital.
- On March 12, the World Health Organisation (WHO) issues a global alert on outbreaks in Vietnam, Hong Kong and Guangdong.
- Between March and May 2003, there are 238 cases in Singapore.
- On July 16, Sars is eradicated in Singapore.

**Deaths:**  
Singapore  
**33**  
Worldwide  
**774**

## 2009-2010 H1N1

**Period:** April 2009 to May 2010

- First detected in humans in the United States in April 2009.
- On April 30, Singapore raises its alert level to orange.
- On May 26, 2009, Singapore receives its first imported case of H1N1, a Singaporean returning from New York.
- Singapore receives its first batch of the H1N1 vaccine in end-October 2009.
- More than 415,000 people in Singapore are infected within the span of nine months.
- On Aug 10, 2010, WHO declares an end to the pandemic. The virus continues to return as a seasonal flu.

**Deaths:**  
Singapore  
**26**  
Worldwide  
**151,700-575,400\***

## 2019-present Covid-19

**Type of virus:** Coronavirus

- On Jan 12, 2020, WHO confirms that a novel coronavirus caused respiratory illness in a cluster in Wuhan, China.
- On Jan 23, Singapore confirms its first imported case of Covid-19.
- On April 7, a set of stringent preventive measures dubbed the "circuit breaker" kicks in.
- As of April 18, there are 5,992 cases in Singapore.

**Deaths:**  
Singapore  
**11**  
Worldwide  
**More than 154,700**



Note: \*Average is taken for visualisation. \*\*Estimation based on excess mortality rate, calculated by Lee et al.

Sources: CENTRES FOR DISEASE CONTROL AND PREVENTION; 'INFLUENZA PANDEMICS IN SINGAPORE, A TROPICAL, GLOBALLY CONNECTED CITY' BY VERNON J. LEE ET AL. ST PHOTO: CHONG JUN LIANG SUNDAY TIMES GRAPHICS

